Installation and Maintenance Manual

IM796

Group: Unitary

Part Number: IM796

Date: March 2005

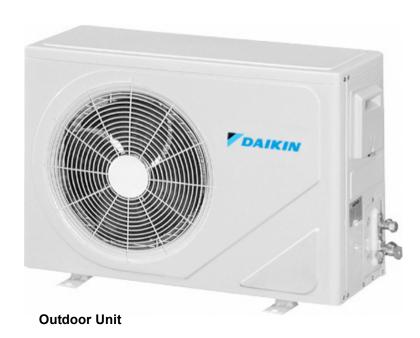
MWM Wall Mounted Split Type Air Conditioner



Indoor Unit



Wired Wall Control (Optional)



Wireless Remote Control (Standard)





Table of Contents

General Information	Unit Indicator Lights17
Safety Precautions3	IR signal receiver17
Unit Dimensions4	Cooling only unit17
Indoor Units4	Heat pump unit17
Outdoor Units5	Special Features
Installation Guidelines6	Dry mode19
Installation Diagram6	Heat mode (heat pump only)19
Installation of Outdoor Unit6	Air Flow Control19
Outdoor Unit Clearances6	Hot Keep (for heat pump only)19
Installation of the Indoor Unit6	Overheating protection
Indoor Unit Clearances 6	(heat pump only)19
Piping 6	Frost prevention19
Mounting Plate Installation7	Fan speed and rated cooling capacity .19
Installing Unit on Mounting Plate 7	Main Filters19
Drain Hose Installation 7	Cooling19
Refrigerant Tubing8	Electrostatic Air Purifying Filter20
Tubing Length & Elevation 8	Deodorizing Filter20
Tubing Preparation8	Filter Replacement20
Tubing Connection To Units 8	Auto Random Re-start Function20
Electrical Connections9	Low Ambient Kit20
Cooling Unit9	Minimum and Maximum Operating
Heat Pump Unit9	Temperatures20
Wiring Diagrams10	Remote Controller Operation Guide
Evacuating and Charging16	Optional Netware 2 - Wired Wall Control 22
Evacuating tubing and the indoor unit 16	Service and Maintenance
Additional charge	Maintenance Schedule23
Charge operation	Troubleshooting23

Model Numbers

Cooling Only

Indoor Unit	Outdoor Unit	Nominal Cooling - BTUH
MWM10F	MLC10B	9200
MWM15F	MLC15B	11,500
MWM20F	MLC20B	19,000
MWM25F	MLC25B	24,000

Cooling/Heat Pump

Indoor Unit	Outdoor Unit	Nominal Cooling - BTUH	Nominal Heating - BTUH
MWM10FR	MLC10BR	9200	9200
MWM15FR	MLC15BR	11,500	12,000
MWM20FR	MLC20BR	19,000	20,000
MWM25FR	MLC25BR	24,000	25,000

Page 2 IM 796

General Information

This manual provides the installation procedures so your air conditioner unit operates properly and provides you the service it was designed to provide. Special adjustment may be necessary to suit local requirements. Before using your air conditioner, please read this instruction manual carefully and keep it for future reference.

Safety Precautions

Before installing the air conditioner unit, please read the following safety precautions carefully.

MARNING

- The installer must determine and follow all applicable codes and regulations. This equipment presents hazards of electricity, rotating parts, sharp edges, heat and weight. Failure to read and follow these instructions can result in property, sever personal energy or death. This equipment must be installed by experienced, trained personnel only.
- Improper installation can cause equipment damage, service personnel injury or death.
- Do not allow flammable fumes near unit or areas sharing ventilation.
- Installation and maintenance must be performed by qualified persons who are familiar with local code and regulation, and experienced with this type of appliance.
- All field wiring must be done in accordance with industry standards and local codes.
- Inspect the unit nameplate to be certain the voltage is the same as the voltage that will be delivered to the unit. Improper electrical wiring can cause property damage, sever personal energy or death.
- The unit must be GROUNDED.
- Make sure wiring does not touch refrigerant piping, compressor, or any moving parts of the fan motors.
- Confirm that the power supply is switched OFF before installing or servicing the unit.

MARNING

Hazardous Voltage!

Disconnect all electrical power including remote disconnects before servicing. Failure to disconnect power before servicing can cause severe personal injury or death.

A CAUTION

Use copper conductors only. Unit terminals are not designed to accept other types of conductors. Failure to do so may cause damage to the equipment.

A CAUTION

- Do not install in a laundry room. Humidity and laundry chemicals can corrode unit components.
- Do not install the unit where leakage of flammable gas may occur. If gas leaks and accumulates around the unit, it may cause a fire.
- Connect drainage piping properly. If drainage piping is not connected properly, water leakage can cause property damage.
- Do not overcharge the unit. This unit is factory precharged. Overcharge will cause over-current or damage to the compressor.
- Keep panel closed. Unsecured panels will cause the unit to operate noisily.

NOTICE

This product was carefully packed and thoroughly inspected before leaving the factory. Responsibility for its safe delivery was assumed by the carrier upon acceptance of the shipment. Claims for loss or damage sustained in transit must therefore be made upon the carrier, as follows:

VISIBLE LOSS OR DAMAGE

Any external evidence of loss or damage must be noted on the freight bill or carrier's receipt, and signed by the carrier's agent. Failure to adequately describe such external evidence of loss or damage may result in the carrie's refusing to honor a damaged claim. The form required to file such a claim will be supplied by the carrier.

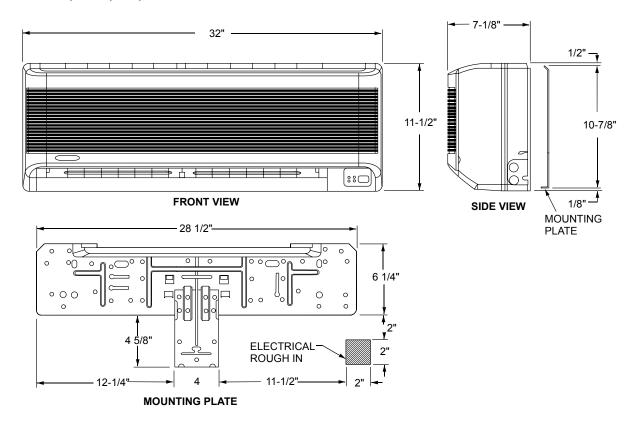
CONCEALED LOSS OR DAMAGE

Concealed loss or damage means loss or damage which does not become apparent until the product has been unpacked. The contents may be damaged in transit due to rough handling even though the carton may not show external damages. When the damage is discovered upon unpacking, make a written request for inspection by the carrier's agent within fifteen (15) days of the delivery date. File a claim with the carrier since such damage is the carrier's responsibility.

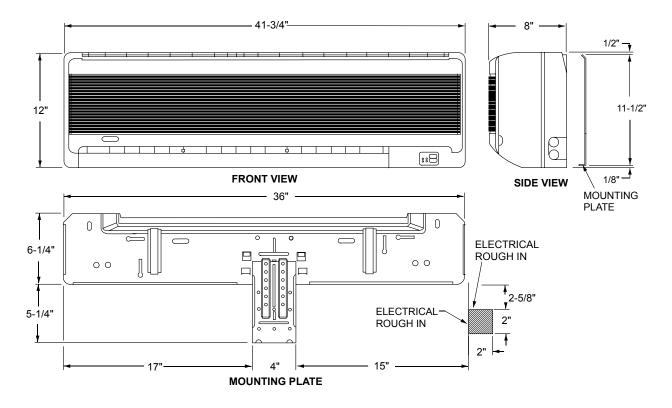
Unit Dimensions

Indoor Units

Model: MWM10F, 10FR, 15F, 15FR



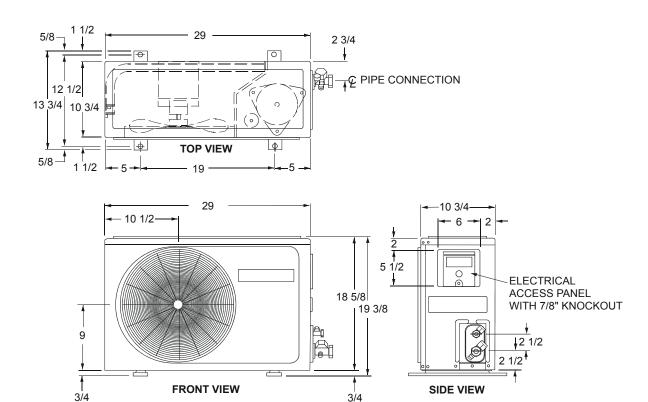
Model: MWM20F, 20FR, 25F, 25FR



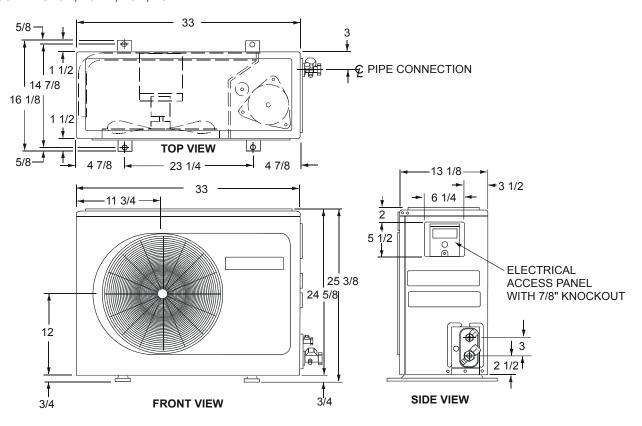
Page 4 IM 796

Outdoor Units

Model: MLC10B, 10BR, 15B, 15BR

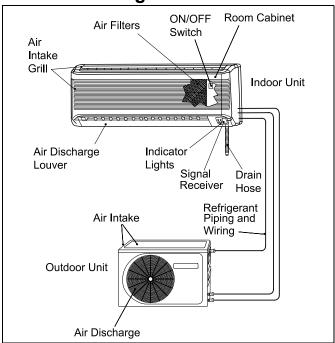


Model: MLC20B, 20BR, 25B, 25BR



Installation Guidelines

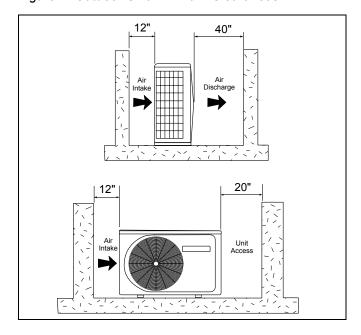
Installation Diagram



Installation of Outdoor Unit Outdoor Unit Clearances

Install the outdoor unit in a manner to prevent mixing hot discharged air with return air flow. Also the unit should be a suitable distance from obstructions *See Figure 1* for installation clearances. Double the dimensions shown if surroundings are more than 72" tall, or if there is an obstruction on top. Select the coolest possible place where intake air temperature is not greater than the outside air temperature (maximum 113°F).

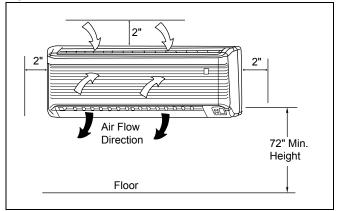
Figure 1. Outdoor Unit Minimum Clearances



Installation of the Indoor Unit Indoor Unit Clearances

The indoor unit must be installed in a manner to prevent mixing the cool discharged air with the hot return air. Please follow the installation clearances shown in *Figure 2*. Do not place the indoor unit in direct sunlight. The location must be suitable for piping and drainage, and be away from doors or windows.

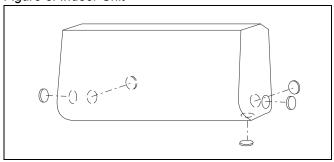
Figure 2. Indoor Unit Minimum Clearances



Piping

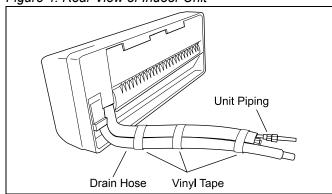
The refrigerant piping can enter the indoor unit at several different locations. Use the knock outs provided in the room cabinet. *See Figure 3*.

Figure 3. Indoor Unit



Bend the pipes carefully to prevent kinks and restrictions. It's best to use a tube bender. The condensation drain hose can be taped to the pipes. *See Figure 4*.

Figure 4. Rear View of Indoor Unit



Page 6 IM 796

Mounting Plate Installation

The mounting plate ships attached to the back of the indoor unit. To detach for mounting on wall, remove plastic rivet from bottom (pry loose with a knife blade) and unhook.

The wall must be strong enough to support the weight of the unit. If necessary, reinforce the wall. Drill holes in plate to align with wall studs and attach with four (4) screws.

If the refrigerant piping is going thru the wall behind the indoor unit, provide a 2-1/2" hole that is slightly pitched to the outside. See Figure 5. Hole must be located in alignment with the arrows on the mounting plate. See Figure 6.

Figure 5. Wall Opening for Piping

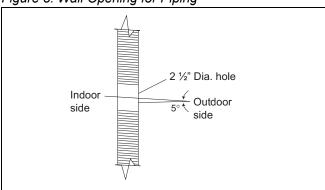
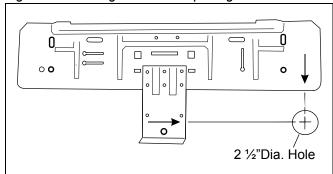


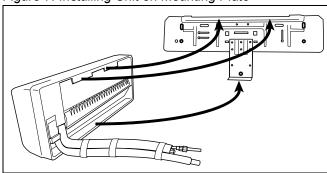
Figure 6. Mounting Plate/Wall Opening



Installing Unit on Mounting Plate

Hook the indoor unit onto the upper portion of the mounting plate (Engage the two hooks at the rear top of the indoor unit with the upper edge of the plate). Properly seat the hooks and replace the plastic rivet at the bottom.

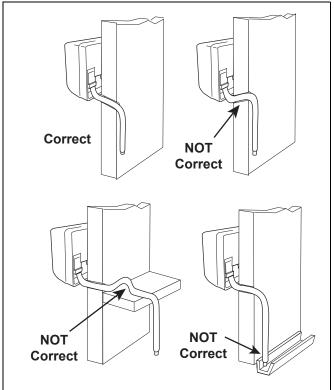
Figure 7. Installing Unit on Mounting Plate



Drain Hose Installation

The condensate drain hose (20" long) comes factory attached to the indoor unit. It is gravity flow. Avoid situations that could restrict drainage. *See Figure 8*.

Figure 8. Drain Hose Installation



Refrigerant Tubing

Tubing Length & Elevation

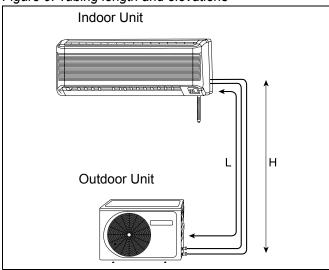
Copper tubing to connect the indoor and outdoor units is supplied by others or it can be ordered from the factory. See Table 1 for requirements. Cover both tubes individually with 3/8" wall foam insulation.

Table 1: Refrigeration Tubing Requirements

Model	10	15	20	25
Maximum length, ft., L	40	40	50	50
Max. elevation, ft., H	16	16	26	26
Max. number of bends	10	10	10	10
Liquid tube size - OD	1/4"	1/4"	1/4"	3/8"
Gas tube size - OD	3/8"	1/2"	5/8"	5/8"

Note: The refrigerant pre-charged in the outdoor unit is for tubing length up to 25 ft. See Table 5, page 16 for additional R-22 refrigerant required on longer runs.

Figure 9. Tubing length and elevations



Tubing Preparation

- Do not use contaminated or damaged copper tubing. Do not remove plastic, rubber plugs and brass nuts from the valves, fittings, tubings and coils until you are ready to connect suction or liquid line into valves or fittings.
- If any brazing work is required, ensure that the nitrogen gas is passed through coil and joints while the brazing work is done. This will eliminate soot formation on the inside wall of the copper tubing.
- Cut the copper tubing with a tube cutter. See Figure 10.
- Remove burrs from cut ends by holding tubing downwards to prevent metal chips from entering the tubing.
- Slide the flare nuts, for both the indoor unit and outdoor unit onto the copper tubing.
- Flare the tubing as shown in *Figure 10*, *Figure 11 and Table 2*.
- The flare must be even and not cracked or scratched.

Figure 10. Cutting and Flaring Tube

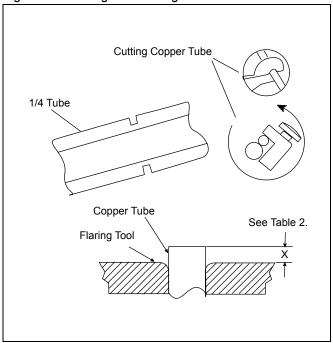


Table 2: Tube Flaring Dimensions

Tube Diameter - OD	X (in.)		
Inch	Imperial	Rigid	
1/4	.051	.028	
3/8	.063	.039	
1/2	.075	.051	
5/8	.087	.067	

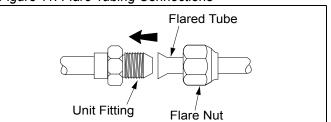
Tubing Connection To Units

- Connect the copper tubing to both the indoor and outdoor units. See Figure 11.
- Torque each flare nut to specifications. See Table 3.
- Cover both tubes individually with 3/8" minimum wall foam insulation.

Table 3: Flare Nut Torque Specifications

Tube Size (in.)	Torque (ft./lb.)
1/4	13.3
3/8	31.0
1/2	40.6
5/8	48.0

Figure 11. Flare Tubing Connections



Page 8 IM 796

Electrical Connections

MARNING

Improper installation can cause severe personal injury or death. Wiring must be done by a qualified technician in compliance with local codes.

- Wiring must be in accordance with all applicable electrical codes.
- Wires must not touch the refrigerant piping, compressor or any moving part.
- All electrical field wiring must be clamped at both the indoor unit and the outdoor unit. *See Figure 13* for typical clamp.
- See Table 4, Figure 12 and Figure 14 for the number of wires, wire gage and fuse/circuit breaker size required.

Table 4: Wire and Fuse/Breaker Requirements

Unit Size	10	15		20 / 25
Voltage - 1Ph/60Hz	115V & 208/ 230V	115V	208V-230V	208V-230V
Power supply wire size Number of wires	12 ga. 2 + gnd.			
Connecting wire size Number of wires - A/C Number of wires - HP	12 ga. 2 + gnd. 4 + gnd.*			
Fuse/Breaker size	15 amp	20 amp	15 amp	20 amp

^{*} Not including the Outdoor Coil Sensor Cable.

Figure 12. Cooling Unit Only

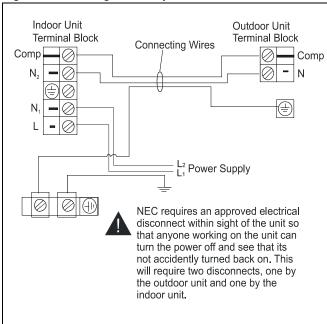


Figure 13. Terminal Block and Wire Clamp

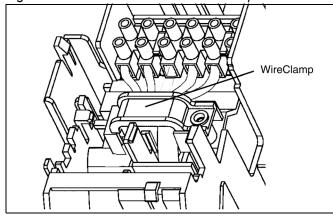
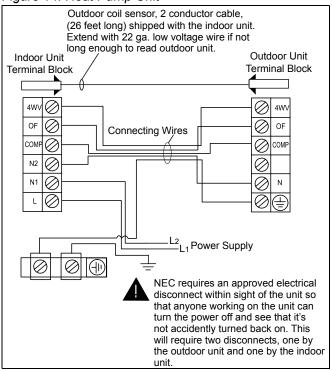


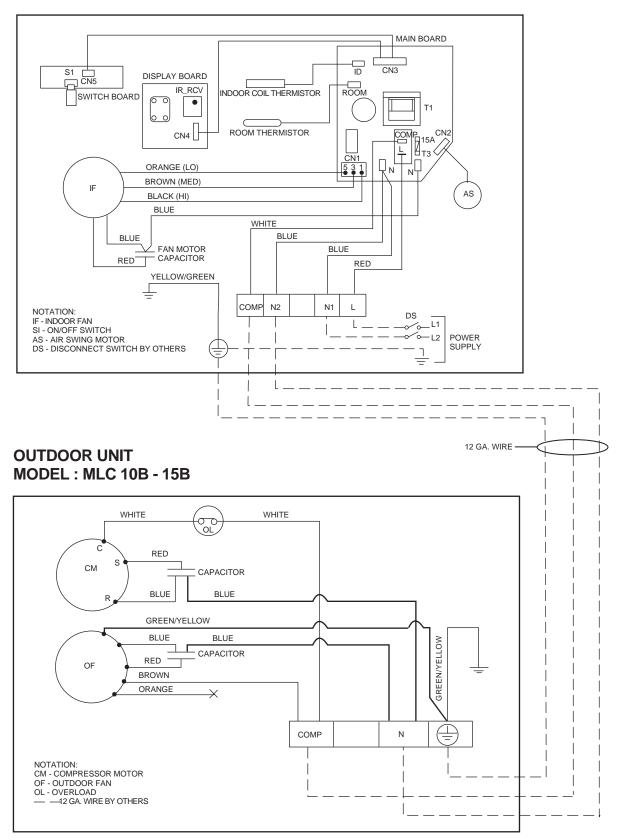
Figure 14. Heat Pump Unit



Wiring Diagrams

INDOOR UNIT

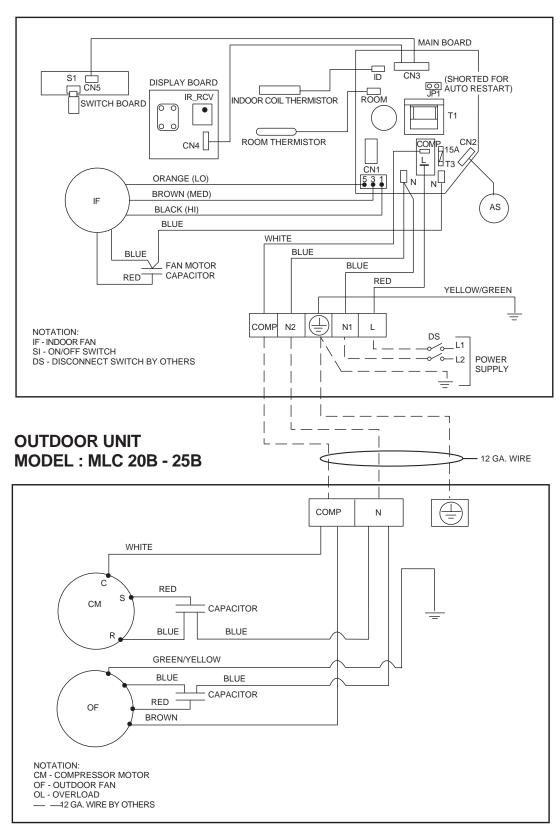
MODEL: MWM 10F-15F

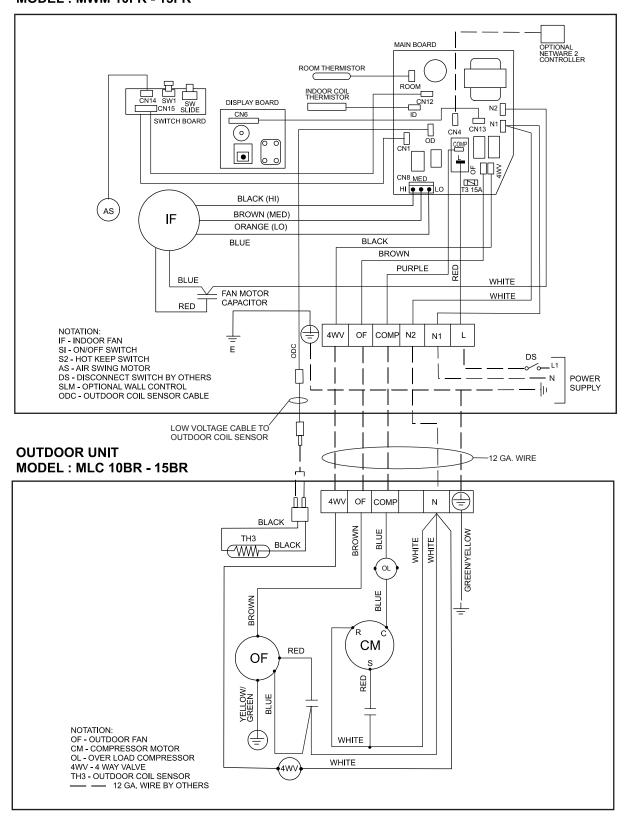


Page 10 IM 796

INDOOR UNIT

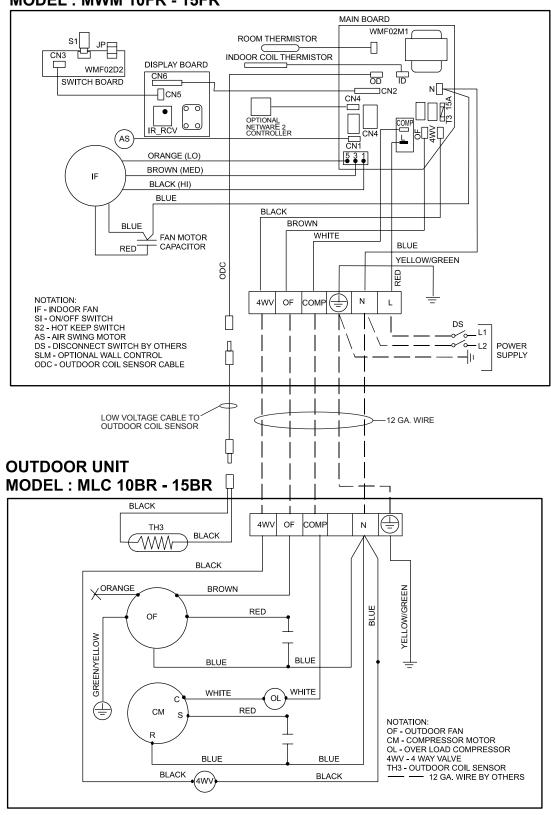
MODEL: MWM 20F - 25F





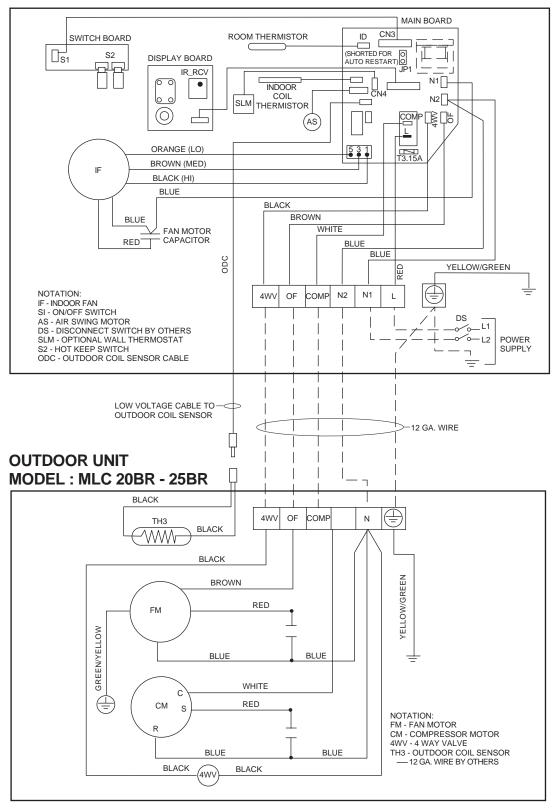
Page 12 IM 796

INDOOR UNIT - 208/230V/1/60 MODEL : MWM 10FR - 15FR



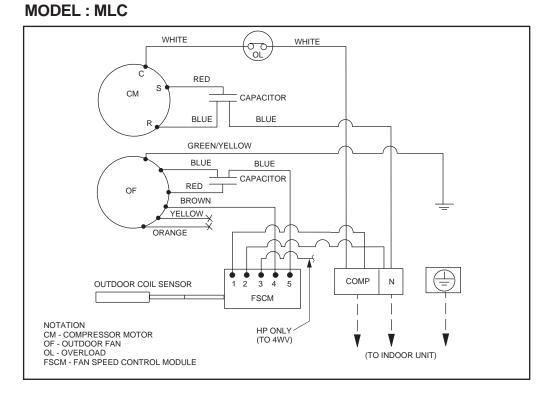
INDOOR UNIT

MODEL: MWM 20FR - 25FR



Page 14 IM 796

OPTIONAL LOW AMBIENT KIT



Evacuating and Charging

Evacuating the tubing and the indoor unit

The outdoor unit is pre-charged with refrigerant R-22. The indoor unit and the refrigerant connection tubing must be evacuated as follows:

- 1. Remove the 3 caps from the valves on the outdoor unit.
- 2. Connect the center of the charging gauge to the vacuum pump.
- 3. Connect the charging gauge to the service port of the 3-way valve. (See Figure 15.)
- 4. Start the pump and evacuate to -760 mm Hg (-29.9" Hg).
- Close the valve of the changing gauge and stop the vacuum pump.
- 6. On the outdoor unit, open both valves using a 4 mm Allen wrench. (See Figure 15.)

Figure 15. 3-way Suction Valve on Outdoor Unit

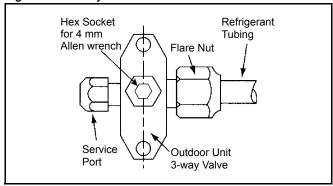
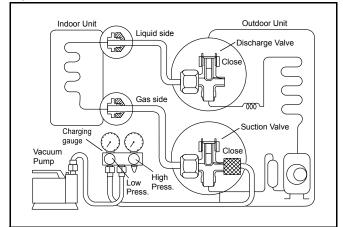


Figure 16 Evacuation Schematic



Additional charge

The refrigerant is pre-charged in the outdoor unit. If the tubing length between the indoor and outdoor unit is no more than 25 ft. than an additional charge after evacuation is not necessary. If the tubing length is more than 25 ft., use additional R-22 as indicated in *Table 5*.

Table 5: Additional R-22 ounces (when tubing length is more than 25 feet)

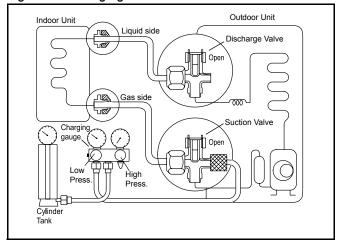
Model	26' - 33'	34' - 40'	41' - 50'
10F	1.0	2.0	-
15F	1.0	2.0	-
20F	1.0	2.0	3.5
25F	3.0	5.3	9.0
10FR	1.6	3.0	-
15FR	1.6	3.0	-
20FR	2.0	3.5	6.0
25FR	4.0	7.0	12.0

Charge operation

This operation must be done by weighing the R-22 being added thru the service port on the 3 way suction valve. *See Table 5. See Figure 17.*

- 1. Remove the service port cap.
- 2. Connect the low pressure side of the charging gauge to the suction service port center of the cylinder tank and close the high pressure side of the gauge. Purge the air from the service hose.
- 3. Start the air conditioner unit.
- 4. Open the gas cylinder and low pressure charging valve.
- When the required refrigerant quantity is pumped into the unit, close the low pressure side and the gas cylinder valve.
- 6. Disconnect the service hose from service port. Replace the service port cap.

Figure 17. Charging Schematic



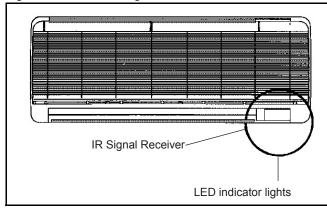
Page 16 IM 796

Unit Indicator Lights

IR signal receiver

When an infrared remote control operating signal is transmitted, the signal receiver on the indoor unit beeps to confirm acceptance of the signal transmission.

Figure 18. Indicator Lights Location - Indoor Unit



Cooling only unit

Table 6 shows the LED indicator lights for the cooling only unit under normal operation and fault conditions. The LED indicator lights are located at the bottom right side of the indoor unit. (See Figure 18 and Figure 19.)

Figure 19. LED Indicator Lights for Cooling Only Unit

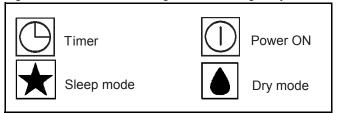


Table 6: LED Indicator Lights: Normal Operation and Fault Conditions for Cooling Only Unit

Power	Sleep	Timer	Dry	Mode or Fault	Action
0		0		Timer	-
0	0			Sleep	_
0			0	Dry	_
Continu- ously			○/●	Indoor Coil Frost	Check for low air flow
Once Every 2 Seconds				Room air sensor contact loose/short.	Repair or replace
Twice Every 2 Seconds				Indoor coil sensor contact loose/short.	Repair or replace
Three Times Every 2 Seconds				Sensor coil problem, com- pressor over- load protection trip or gas leak.	Check circuit breaker, check for gas leak
○ ON ○/● ON or OFF					

Heat pump unit

Table 7 shows the LED indicator lights for the heat pump unit under normal operation and fault conditions. The LED indicator lights are located at the bottom right side of the indoor unit.

The heat pump units are equipped to maintain selected room temperature by switching automatically to either "cool" or "heat" mode.

Figure 20. LED Indicator Lights For Heat Pump Unit

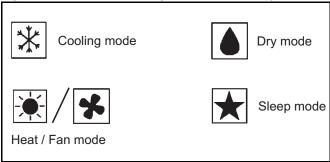


Table 7: LED Indicator Lights: Normal Operation and Fault Conditions for Heat Pump Unitt

Cool	Dry	Fan	Heat	Sleep	Mode or Fault	Action
0				○/●	Cooling	_
	0				Dry	_
		0			Fan	_
			0	○/●	Heat	-
•			0	○/●	Auto mode in heating operation. *	_
0			•	○/●	Auto mode in cooling operation. *	_
			•		Defrosting outdoor coil.	Heating will resume after coil is defrosted.
•					Compressor cycling on overload	Low outdoor air flow, defective compressor or overload.
				•	Indoor coil sensor loose or defective	Attach or replace.
	•				Outdoor coil sensor loose or defective	Attach or replace.
		•			Room air sensor loose or defective	Attach or replace.
					Unit Malfunctions	If in AUTO or SLEEP mode, switch to Heat, turn SLEEP off, unplug power cord and plug back in.
•	•					If both lights blink with unit in Heat or Cool and SLEEP off, the problem may be coil sensor, compressor has tripped or low refrigerant.
	\bigcirc (ON		○/● ON c	or OFF Blink	king

^{*} Unit has 10 minute delay before it will switch between modes.

Page 18 IM 796

Special Features

Dry mode

 Select this mode when the standard Cool mode does not provide sufficient dehumidification. The compressor and indoor low fan will cycle together and will operate for longer periods of time to provide the increased rate of dehumidification. As a result, the room temperature differential may increase slightly.

Heat mode (heat pump only)

- When the unit is switched on from cold start or defrosting cycle, the indoor fan will start to operate only after the indoor coil becomes warmer.
- When the set temperature is achieved, the indoor fan will stop as the indoor coil starts to cool.

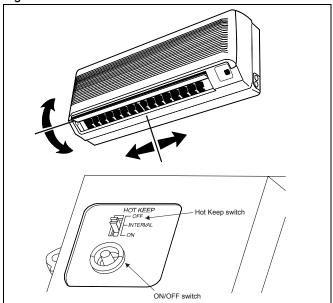
Air Flow Control

- For more effective air circulation, you can manually adjust the air discharge grille to the left or right.
- During cool and dry mode operation, do not direct the air discharge louver downwards as it may cause condensate to drip. (See Figure 21).

Hot Keep (for heat pump only)

- With the Hot Keep switch OFF, the indoor fan will stop when coil temperature drops to 86°F. With the switch ON, the fan will not stop unless coil temperature drops below 65°F. With the switch in INTERVAL, and the unit is not heating, the fan is on for 30 seconds and off for 2 min.(See Figure 21).
- In cool mode, fan runs continuous at selected speed.
- The switch is located on front of the indoor unit, above the ON/OFF switch. (See Figure 21).

Figure 21



Overheating protection (heat pump only)

 If the indoor coil temperature exceeds 145°F because of high ambient conditions, dirty air filter, etc., the compressor will turn off.

Frost prevention

- If the indoor coil starts to frost in cooling mode, the compressor will stop and the Power indicator light will blink.
- If the outdoor coil becomes frosted, heating will stop for a few minutes while the unit goes into defrost and the Heat indicator light blinks.

Fan speed and rated cooling capacity

- The rated cooling capacity is provided at the maximum fan speed.
- The cooling capacity is slightly lower when the unit is operating at MEDIUM and LOW fan speed.

Main Filters - Permanent and Washable

Air filters must be cleaned at regular intervals. Twice annually may be adequate in some areas, while twice monthly may be required in others. Areas with high dirt and lint content or heavy usage of units require more frequent filter maintenance than those areas of relatively clean operating or low usage conditions. Unit malfunction will occur if air filters are not kept clean. Vacuum the filters from the dirty side or wash with hot water and a mild detergent. Allow the filters to dry thoroughly before replacing them. See Figure 22.

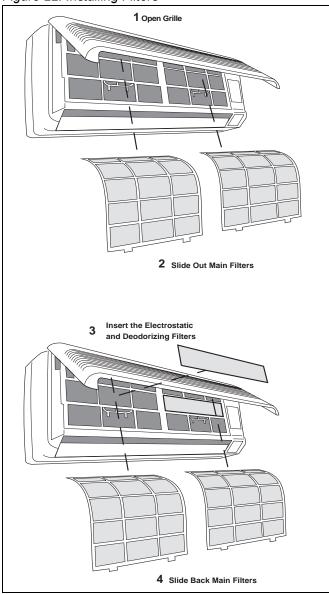
Electrostatic Air Purifying Filter

Pre-charged electrostatic polypropylene filter removes microscopic dust, smoke and small invisible particles to keep the room air clean.

Deodorizing Filter

Activated carbon filter removes unwanted smells and odors in the air and keeps the room air fresh.

Figure 22. Installing Filters



Filter Replacement

MARNING

Disconnect the main power supply before opening the return air grille.

DO NOT restore power until the grille is closed.

Replace the electrostatic air purifying and deodorizing filters every 6 months or sooner if they turn brown.

Replacement filters can be purchased from your sales representative or distributor.

Use the new filter immediately once it has been removed from the package.

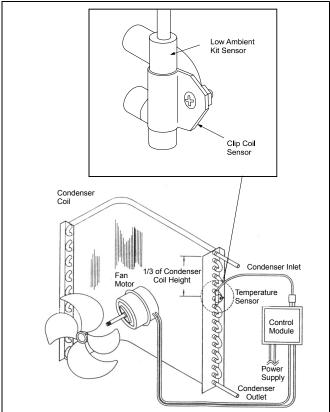
Auto Random Re-start Function

If there is a power loss to the building, the units will randomly restart when the power is restored. Control will restart at the last setting regardless of how long the power was off.

Low Ambient Kit

With this option, the unit can cool down to 32°F outdoor temperature. (Standard units only cool down to 66°F.) To install, wire the Fan Speed Control Module (FSCM) in the outdoor unit per wiring diagram on Page 15. Attach the Outdoor Coil Sensor to the return bend as shown in *Figure 23*. Wrap sensor and return bend with insulating tape to promote accurate sensing of the refrigerant temperature. Refer also to the instructions supplied with the kit.

Figure 23. Low Ambient Kit Location



Minimum and Maximum Operating Temperatures

Cooling

Temperature	Ts °F	Th °F
Minimum Indoor	67	57
Maximum Indoor	80	67
Minimum Outdoor	*66	57
Maximum Outdoor	115	75

Heating (heat pump only)

Temperature	Ts °F	Th °F
Minimum Indoor	50	_
Maximum Indoor	80	_
Minimum Outdoor	16	16
Maximum Outdoor	75	65

Ts = Dry Bulb Temperature, Th = Wet Bulb Temperature

Page 20 IM 796

^{* 32 °}F with optional Low Ambient Kit

Remote Controller Operation Guide

Transmission source

The source where the signal is

Temperature Setting

- Set the desired room temperature by pressing the buttons to increase or decrease the set temperature.
- The temperature setting range is from 60°F to 86°F.
- Press both buttons simultaneously to toggle the temperature setting between °C and °F.

Fan Speed Selection -

Press the button until the desired fan option displays (auto, low, mod or high). "Auto" selection provides high fan until room temperature is within 2°F of setting, then switches to low speed. Fan, runs continuous in Cool and cycles in Heat.

ON Timer Setting

- Press the SET button will activate the on timer function.
- Set the desired on time by pressing the SET button continuously. If the timer is set to 7.30am, the air conditioner will turn on at 7.30 sharp.
- Press the CLR button to cancel the on timer setting.

Automatic Air Swing

- Press the SWING button to activate the automatic air swing function.
- To distribute the air to a specific direction, press the SWING button and wait until the air conditioner baffle swings to the desired direction. Press the button again to hold it.

Signal Transmission Indication

Blinks to confirm the last setting was sent to the unit.

On/Off Button

- Press once to start the air conditioner.
- Press again to stop the air conditioner.

Operation mode

- Press the MODE button to select the type of operating mode.
- For cooling only unit, the available modes are: COOL, DRY & FAN.
- For heat pump unit, the available modes are: AUTO, COOL, DRY, FAN & HEAT.

OFF Timer Setting

- Press the SET button will activate the off timer function.
- Set the desired off time by pressing the SET button continuously.
- Press the CLR button to cancel the off timer setting.

Sleep mode setting

- Press the button to activate sleep mode. This function is available under COOL, HEAT & AUTO mode.
- In COOL mode, the set temperature will increase 1.0°F after 30 minutes, 2°F after 1 hour and a total of 4°F after 2 hours.
- In HEAT mode, the set temperature will decrease 2°F after 30 minutes, 4°F after 1 hour and a total of 5°F.

Clock Time Setting

AUTO

IB:BB ## 스윙

CI

Press button + or - to increase or decrease the clock time.

Symbol Identification









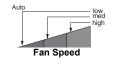












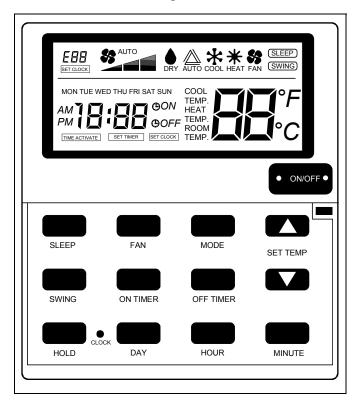






IM 796

Netware 2 - Optional Wired Wall Control (Heat Pump Only)



Features:

- 1. Modes Cool, Heat, Auto, Dry, Fan and Off.
- 2. **Temperature Range** 60° F to 86° F. (Press both arrows simultaneously to convert from °C to °F.)
- 3. **Timer** Seven day clock capable of a different On/Off time for each day of the week. Note: Hold button is used to temporarily override timer.
- Shows time of day.
- 5. Electronic lockout to prevent tampering.
- 6. Fan Speeds Low, medium, high and auto.
- 7. **Sleep** Sets temperature back for sleeping.
- 8. **Swing** Swings or positions air baffle for better air distribution.
- 9. Display normally shows room temperature. (Momentarily shows set point when a change is made.)
- 10. Heat symbol (★) blinks while outdoor coil defrosts (heat pump only).
- 11. Error codes blink on display:
 - E1 Room sensor loose or defective.
 - E2 Indoor coil sensor loose or defective.
 - E3 Outdoor coil sensor loose or defective.
 - E4 Compressor cycling on overload.
 - E5 Low refrigerant charge.

For more detail, see manual that ships with the Wall Control.

Page 22 IM 796

Service and Maintenance

A CAUTION

Disconnect the electrical power supply before performing any service, maintenance or troubleshooting.

Maintenance Schedule

Item	Maintenance Procedures	Frequency
Indoor Air Filters	Lift the return air grille and remove the filters (See Figure 22). Clean the filters by using a vacuum cleaner or wash in lukewarm water and soap. Rinse and dry before reinstalling.	As required to prevent restriction of air flow.
Indoor Cabinet	Remove any dust on the grille or panel by wiping it with a soft cloth soaked in lukewarm water (below 40°C/104°F) and a mild detergent.	As required to maintain appearance.
Outdoor Unit	Clean the louvers and coil. Be careful not to bend or flatten the aluminium fins. DO NOT use cleaning fluids that might corrode the coil.	As required to prevent restriction of air flow.

Troubleshooting

If any malfunction of the unit is noted, immediately switch off the power supply.

Check the following chart for possible causes/treatments.

If the trouble persists, please call your local dealer/serviceman.

Trouble	Possible cause/treatment	
The compressor does not operate.	Protection against frequent starting. Wait for 3 to 4 minutes for the compressor to start operating.	
	Power failure.	
Fans and compressor do not	Check fuse or circuit breaker.	
operate.	Power supply disconnect off.	
	Delay timer may be set incorrectly.	
	Dirty air filters.	
Air flow too low or insufficient cooling/heating capacity.	Open Doors or windows.	
	Adjust thermostat setting.	
Discharge air flow has bad odor.	Smoke, perfume, etc. may have collected on the indoor coil.	
	Clean coil.	
	Use dry mode. High humidity in conditioned space.	
Condensation on the return air grille of the indoor unit.	Set temperature too low. Increase temperature setting and operate unit at high fan speed.	
Condensate leaking into room.	Condensate drain plugged.	
Hissing sound from the unit during operation.	Refrigerant fluid flowing into the evaporator coil. Operate for a while to see if sound goes away.	

This document contains the most current product information as of this printing. For the most up-to-date product information, please go to www.DaikinApplied.com.
Daikin Applied 800.432.1342 www.DaikinApplied.com
© 2004 Daikin